

**CLOSING THE GAP BETWEEN KNOWLEDGE AND BEHAVIOR:  
TURNING EDUCATION INTO ACTION  
*EXECUTIVE SUMMARY***

**Sponsored by the National Endowment for Financial Education  
Denver, Colorado—August 10–12, 2005**

In August 2005, the National Endowment for Financial Education® (NEFE®) hosted a groundbreaking event, bringing educators from a variety of disciplines together to explore how to make financial literacy programs more effective. This was the first symposium ever to combine financial educators with leaders from other fields—neuroscience, change theory, behavioral economics, and psychology—with the common goal of finding new ways to help move people toward taking positive actions to create a healthier financial future. The symposium, titled *Closing the Gap Between Knowledge and Behavior: Turning Education into Action*, was organized around four featured presentations that examined topics as diverse as the implications of brain biology on behavior, effective programs that incorporate change theory, observed economic behavior versus traditional economic theory, and the psychology of an individual's money personality.

The event took place August 10-12, 2005, in Denver, Colorado. Participants of the symposium explored the question “How can financial educators motivate people to increase their positive actions toward achieving long-term financial stability?” This fundamental question is common among financial literacy professionals and others who are concerned about a national savings rate near zero,<sup>1</sup> national consumer debt over \$2 trillion,<sup>2</sup> 1.6 million bankruptcy filings in 2004,<sup>3</sup> and the belief that many Americans are inadequately preparing for their retirement.<sup>4</sup> While much progress has been made in the development of financial literacy programs, educators are increasingly asking themselves how to make those programs even more effective.

The theme of the discussion built and expanded on the outcome of the first NEFE symposium, titled *The State of Financial Literacy in America—Evolution and*

*Revolutions*, which took place in 2002. From that gathering, participants concluded that Americans' failure to make knowledgeable decisions about their personal finances is having a dramatic national impact. Participants acknowledged that being financially literate requires more than just acquiring knowledge. Individuals who are financially literate must act upon that knowledge and change behaviors that negatively impact their financial well-being.

The 2005 symposium provided an opportunity to examine behavior change through the lenses of other disciplines. Its purpose was to promote learning across multiple disciplines, all of which seek to promote healthy well-being, whether physical, mental, emotional, or financial, and to learn strategies from these other disciplines that may have practical implications for the financial literacy field.

The first area of inquiry focused on brain biology and the human tendency to delay taking actions that require effort, including actions about financial issues. David Laibson, Ph.D., professor of economics at Harvard University, presented recent, and somewhat controversial, neuro-imaging research that provided clues as to why people sometimes fail to carry out their own best intentions. Participants learned methods that could be used to help people counteract this tendency to procrastinate and instead take action for a healthier financial future.

In the second area of inquiry, James Prochaska, Ph.D., director of the Cancer Prevention Research Center and professor of clinical and health psychology at the University of Rhode Island, presented his well-known Transtheoretical Model of Change, in which behavior is defined as a process that unfolds over time. Participants discussed what is required to support individuals who are moving through the various stages of change. By assessing a person's stage of change and adapting interventions that meet people where they are in the process, financial education practitioners can develop more effective programs.

The third area of inquiry focused on behavioral economics: observed human behavior versus human behavior as predicted by traditional economic theory. Colin Camerer, Ph.D., professor of business economics at the California Institute of Technology, explored themes of loss aversion, ambiguity aversion, and decision isolation in terms of how people make economic choices. Expanding on some of the ideas of the first two presentations, participants discussed methods to help people counteract their tendencies toward procrastination and to take positive actions towards increasing savings.

The final presentation was a psychological analysis of different “money personalities” by Kathleen Gurney, Ph.D., president and CEO of Financial Psychology Corporation. Participants considered how an understanding of the psychological and emotional components of people’s money decisions is important for maximizing financial well-being. If psychological needs are ignored, people can become “frozen” and fail to take positive actions. Understanding a person’s money personality and creating programs to support a person’s particular style of money management can help move someone to a healthier financial future.

Ideas generated in the four core areas of inquiry were further discussed and refined in panel discussions, roundtable sessions, and breakout groups. A final general session provided the opportunity for participants to identify the most important next steps needed to achieve financial education programs that result in positive action.

## **Next Steps**

The symposium laid the groundwork for considering how research from a variety of fields can be applicable to financial literacy programs. Participants realized that sharing knowledge and ideas across disciplines could result in fresh insights for financial educators. The many discussions among symposium participants during the three-day meeting, whether in presentations, question-and-answer periods, roundtable sessions, panel discussions, or breakout groups, resulted in the identification of gaps in current knowledge and critical areas for further research.

Following are nine topic areas that were proposed during the fifth and final session of the symposium as important “next steps” to support financial education professionals in closing the gap between knowledge and behavior.

**Outcome measurement tools.** Standardized measurement tools would help financial educators determine the client’s mastery of key financial concepts and practices, as well as objectively determine the effectiveness of programs across different populations.

**Longitudinal studies.** Many symposium participants felt that longitudinal studies that track behavior over time, are very important in understanding long-term financial behavior.

**Program evaluation.** Many participants talked about the importance of conducting impact studies to measure the effectiveness of current financial education programs. Impact studies would allow practitioners to know which financial education curricula are most effective and in what settings.

**Identification of best practices.** A recurring need identified by symposium participants, and echoed in Prochaska’s presentation, is the need to identify best practices—those professional practices that, when used, offer the greatest positive outcomes. For example, are face-to-face programs, online programs, or at-home programs most effective? What kind of human interaction is most effective and when? When does adding an interactive, online tool help a person progress? Or, is the most effective program one that uses all of these components?

**New delivery mechanisms for financial education.** Participants felt that it was important to research the concept of just-in-time delivery of financial education and measure its effectiveness. It’s important to know the best methods for delivery of financial education so that educators can respond effectively to “teachable moments” and

time-critical functional literacy requirements. One participant suggested that we need a “spiral curriculum” to address the skills that are needed at various life stages.

**Funding.** Participants talked about the need for identifying new sources of funding for financial education programs by finding corporate sponsors in sectors other than the financial services industry. Educators were encouraged to look at their target population and then seek support from companies marketing products that align with that population. For example, if the target population is the elderly, think about companies that create products for that population. If the target population is teenagers, think of companies who target teens, such as clothing retailers or electronic product companies.

**Partnerships within the private sector.** Many ideas surfaced about how to create and leverage partnerships within the private sector. Participants talked about using a different approach in marketing to, and soliciting funds from, foundations and corporations by focusing on financial well-being or life skills, rather than just financial education. Participants also talked about creating new partnering opportunities with private sector companies and agencies that could help bring positive financial education messages to large populations. For example, partnering with a payroll company that provides services to millions of American households each year is a tremendous opportunity for financial education through such simple practices as brochures included with regular paychecks.

**Creation of centralized research repository.** Participants talked about the importance of establishing one centralized repository for research reports. Participants also noted that it would be helpful for such a repository to provide a “translation function”—possibly in the form of research summaries—so that the research gets out to the practitioner community in a condensed and usable format.

**Additional research and creation of an expert panel.** Each featured speaker, as well as participants, presented research ideas. For example, participants discussed the need for research in order to define “teachable moments” and functional financial literacy requirements. As Prochaska pointed out in his presentation, a crisis will not necessarily

move someone to another stage of change, but intervention added to a crisis situation—a potential “teachable moment”—can help people break out of their stuck point and progress along the path.

Similarly, research to define critical age-related skills would be beneficial to know when designing programs for target populations. This research would answer this question: What are the skills that people need to know in order to accomplish prescribed goals at every age level? Skills needed as a young adult will be very different than those needed by a person in his or her 50s who is contemplating retirement. Defining these functional financial literacy requirements and how to measure them is key to successful program implementation.

Further discussion about research needs covered a wide range of topics, including meta-research, multi-disciplinary studies, studies of successful people, and studies of mandates in other countries. Meta-research, surveys of the existing literature in order to identify research gaps, would be helpful in allocating limited research funds. Multi-disciplinary studies, linking psychological and social history factors with financial education, may help practitioners improve education to target populations. Studies of successful people may provide insights into current programs—what works and what doesn’t.

One participant felt that in order to design and implement effective interventions for any behavior change, the target community must be involved in a collaborative way. If educators use the target community to help design programs, they may find that the best practices that are identified in the literature may need to be tweaked or may not work. As Prochaska pointed out, the goal of any intervention is to meet the client where they are. One participant felt that if a “one-size-fits-all” curriculum is used, educators are not necessarily helping their population; they’re just making it easier for themselves.

In considering how the Transtheoretical Model of Change might be applied to financial education programs, Prochaska discussed several areas where additional research would be helpful. For example, action criteria for each financial well-being program must be

carefully and critically defined to correctly assess the stage of change an individual is in. Practitioners must know where a client is in terms of stages of change to design appropriate interventions.

Another research need is to identify the barriers to taking a particular action and the benefits of taking that action, Prochaska suggested. It's important to understand the barriers that people have for not taking an action towards a particular goal. For example, what is the number-one barrier that people have for not joining a 401(k) retirement plan? What is the primary barrier that people have for not opening a savings account? Once educators and practitioners know what those barriers are, they can help people see the benefits. Laibson also talked about understanding barriers to action when he said that one reason why people don't join a 401(k) program "on the spot" is that they want to discuss their options with their spouse or partner prior to signing up. Knowing this fact can help in designing a program such as the "active decision" intervention, where employees are given 30 days to make a decision, but at the end of 30 days they had to give the company a "yes" or "no" answer to joining the 401(k).

A third area for research that was discussed after Prochaska's presentation was the need to understand the developmental processes of financial behavior. This research would provide insight into the specific developmental age at which someone is interested and engaged with financial issues. For example, what is the mean age at which people finally start to save more money? Such information could help practitioners target education to specific populations.

Prochaska said that in some studies, best practice included the use of computer feedback guides. Symposium participants felt that further research on the effectiveness of online programs versus face-to-face counseling would be helpful. This research would answer questions such as: What kind of human interaction is most effective and when? When does adding an interactive, online tool help a person progress? Camerer discussed another use of computer tools in his optimal savings life cycle simulations. Further development

of computer simulation models could help people envision their financial future based on current earnings, spending, and saving.

Laibson's presentation also generated some ideas for research, including defining structures that encourage action and discourage procrastination. He presented two such structures that have been studied and applied to savings in a 401(k) program—automatic enrollment and active decisions. Research could further refine the best uses of these mechanisms as well as identify new structures that might accomplish similar goals. In addition, participants felt research was required to understand the effects of additional saving in one account versus “dis-saving” in another account.

Finally, participants suggested the creation of a panel of experts who could identify and prioritize key areas for research in the financial education field. The panel of experts could guide research efforts to ensure that top priorities are funded first. They could also serve as a review panel for new research topics.

### **A New Paradigm for Financial Education**

Throughout the symposium, participants discussed the importance of thinking in terms of behavior change and not just education. Laibson talked about the importance of yoking education to a “mechanism for action.” Prochaska talked about the importance of gearing interventions to the learner's stage of change so that they can proceed to action.

Symposium participants recognized the need to change their own thinking so that behavior change, and not just information exchange, is part of the goal of teaching financial well-being.

Participants agreed that talking with experts from other disciplines and reading the literature from other personal well-being fields will continue after the symposium. This ongoing dialogue will provide an opportunity to learn new strategies for affecting behavior change. The symposium opened new ground in the discussion of how economic, psychological, sociological, and biological factors may affect the financial education



field. This interdisciplinary approach encourages best practices from other disciplines that also use education to affect behavior change, and can be utilized to understand and adapt to financial well-being programs.